1900MNRAS..60..593.

clock's rate, losing 3·5 secs. daily, rests upon a single star observed on the 24th, and a pair on the 29th compared with seven clock-stars observed on the 28th. The mean rate between 24th and 28th was 3·3 secs., and 3·8 secs. between 28th and 29th. The resulting sidereal time of last contact was :

		h m s
By the 5-inch Clark ...	...	9 5 8·3
„ „ 4-inch Cooke ...	...	9 5 8·4

The sky was very clear at the time, and definition excellent.

Observations of the Partial Eclipse of the Sun, 1900 *May* 28, *made at the Radcliffe Observatory, Oxford.*

(*Communicated by the Radcliffe Observer.*)

Owing to the prevalence of cloud, the first contact could not be seen ; but toward the end of the eclipse the sky cleared, and satisfactory observations of the last contact were secured.

An interval of clear sky occurred just before the transit of the Moon's limb over the more prominent of two groups of sun-spots, and times of contact with the umbra of the largest of the group were observed.

In order to determine approximately the time of "greatest phase" the relative distances of the limbs of the Sun and Moon were recorded during intervals of clear sky. The resulting time is $3^h\ 53^m\ 20^s$ G.M.T.

The following are the observations of sun-spot and last contact :—

Phenomenon.	Observer.	Telescope.	Aperture.	Power.	G.M.T.	Remarks.
Sun-spot.			in.		h m s	
First contact with umbra	R.	Heliometer	7·5	80	3 12 51	
Last contact	R.	„	„	„	3 13 3	Thought I saw it again some seconds after this time. Very diffused ; cloud passing.
End of Eclipse.						
Last contact	W.	Barclay	10	90	4 56 35·4	Very good ; last trace had just vanished. Recorded on Chronograph.
„ „	R.	Heliometer	7·5	80	4 56 32·7	Good, but suspected trace of contact 1^s later. Observed by projection on a screen.
„ „	C.	Marlborough	3·2	72	4 56 34·2	Instrument shaken by wind.

Observers : W., Mr. W. Wickham ; R., Mr. W. H. Robinson ;
C., Mr. E. E. McClellan.

Radcliffe Observatory : 1900 *June* 7.

Downloaded from http://mnras.oxfordjournals.org/ at Mount Allison University on July 17, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

1900MNRAS..60..593.

The Partial Eclipse of the Sun, 1900 *May* 28, *observed at Armagh.*
By J. L. E. Dreyer, Ph.D.

At Armagh passing clouds were frequently obscuring the Sun during the greater part of the day, and the first contact was therefore not seen here. The last contact was very satisfactorily observed with the 10-inch refractor. It occurred at $4^h\ 49^m\ 46^s{\cdot}2$ G.M.T.

Armagh Observatory: 1900 *June* 7.

The Partial Eclipse of the Sun, 1900 *May* 28, *observed at Forest Lodge, Maresfield, Sussex.* By Capt. W. Noble.

At the predicted time of first contact the sky was covered with a dense pall of black cumulus, and it was not until at least a quarter of an hour later that the first glimpse of the Sun was obtained. By that time, of course, the Moon had advanced very perceptibly on to his disc. At the time of greatest obscuration it was very instructive to note how much larger the crescent of the Sun appeared (owing to irradiation) as projected upon a sheet of cardboard than it did as viewed through a densely smoked glass. As the eclipse advanced the sky cleared, and the latter part of the phenomenon was observed in a brilliant area of sky. The smoothness of the Moon's limb was very notable. In all the (pretty numerous) eclipses I have observed I have never seen it so curiously free from irregularity. No trace of a lunar atmosphere was detectable at the cusps, nor could the Moon's limb be traced in the smallest degree beyond the Sun, although I have formerly succeeded in seeing it to the extent of $4''$ or $5''$ outside of the solar limb. The last contact was well observed at $9^h\ 21^m\ 38^s$ local sidereal time $= 4^h\ 58^m\ 14^s{\cdot}85$ G.M.T. The power employed was 74, with a diagonal eyepiece, on my 4·2-inch Ross Equatorial. The latitude of my observatory is $51^\circ\ 0'\ 59''{\cdot}8$ N. and its longitude $17^s{\cdot}11$ E. of Greenwich.

Forest Lodge: 1900 *June* 7.

Downloaded from http://mnras.oxfordjournals.org/ at Mount Allison University on July 17, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System